

DERWENT-ACC-NO: 1994-239392

DERWENT-WEEK: 199429

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TITLE: Sizing compsn. for fibre reinforcing  
composite materials - contains modified epoxy! resin and  
water soluble fluoroalkyl cpd. penetrant

PATENT-ASSIGNEE: SUMIKA-HERCULES CO LTD [SUMIN]

PRIORITY-DATA: 1992JP-0350669 (December 4, 1992)

PATENT-FAMILY:

PUB-NO	PAGES	MAIN-IPC	PUB-DATE	LANGUAGE
JP 06173170 A	011	D06M 015/55	June 21, 1994	N/A

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-DESCRIPTOR	APPL-NO
JP 06173170A	December 4, 1992	N/A	1992JP-0350669

INT-CL (IPC): D06M015/55, D06M015/643

ABSTRACTED-PUB-NO: JP 06173170A

BASIC-ABSTRACT:

A sizing compsn. for fibres reinforcing composite materials is one contg. as essential components, (1) a modified epoxy resin which is water-soluble or autoemulsifiable in water, and (2) a penetrant consisting of a water-soluble fluoroalkyl cpd. and/or a water-soluble polysiloxane; the penetrant content in the compsn. is 0.05-5.0 wt.% to the modified epoxy resin; a 1 wt.% aq. soln. of

the compsn. has a surface tension of 40 dyne/cm or less at 20 deg. C, and, when the modified epoxy resin is autoemulsifiable in water, the emulsion has an average dia. of the emulsion particles of 0.5 microns or less and contains no emulsion particle having a dia. of 3 micron or greater.

USE/ADVANTAGE - This compsn. is applied to fibre bundles used for reinforcing composite materials, It prevents generation of fluffs and facilitates the fibre bundle processing. It penetrates rapidly and uniformly into bundles of such hydrophobic fibres as carbon fibre, aramid fibre, glass fibre, alumina fibre, etc. The compsn. does not need a toxic or inflammable organic solvent.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: SIZE COMPOSITION FIBRE REINFORCED COMPOSITE MATERIAL CONTAIN

MODIFIED POLYEPONIDE RESIN WATER SOLUBLE  
FLUOROALKYL COMPOUND  
PENETRATE

DERWENT-CLASS: A21 A94 F06

CPI-CODES: A06-A00B; A07-B04; A10-E01; A12-G04; F01-H06A;  
F03-D;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1]  
017 ; P0737\*R P0635 H0293 F70 D01 D18 ; S9999 S1070\*R  
Polymer Index [1.2]  
017 ; B9999 B3509 B3485 B3372 ; B9999 B5447 B5414 B5403  
B5276 ;  
K9574 K9483 ; B9999 B5436 B5414 B5403 B5276 ; K9610 K9483  
; K9892  
; N9999 N7090 N7034 N7023 ; N9999 N7147 N7034 N7023  
Polymer Index [2.1]  
017 ; P0464\*R D01 D22 D42 F47 ; H0226 ; M9999 M2391 ;  
S9999 S1025  
S1014 ; S9999 S1616 S1605  
Polymer Index [2.2]  
017 ; P0964\*R F34 D01 ; M9999 M2391 ; H0226 ; S9999 S1616  
S1605

; S9999 S1025 S1014  
Polymer Index [2.3]  
017 ; B9999 B3521 B3510 B3372 ; Q9999 Q7216 Q7114 ; B9999  
B5209  
B5185 B4740 ; B9999 B5390 B5276 ; K9574 K9483 ; K9518  
K9483 ; K9530  
K9483 ; K9610 K9483 ; ND01 ; ND04 ; N9999 N7147 N7034  
N7023  
Polymer Index [2.4]  
017 ; H0226  
Polymer Index [3.1]  
017 ; P1445\*R F81 Si ; S9999 S1616 S1605  
Polymer Index [3.2]  
017 ; Q9999 Q7216 Q7114 ; B9999 B5390 B5276 ; B9999 B3521  
B3510  
B3372 ; K9518 K9483 ; K9530 K9483 ; K9574 K9483 ; K9610  
K9483 ;  
ND01 ; ND04 ; N9999 N7147 N7034 N7023

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0016 0226 0231 1279 1282 1283 1306 1990 2427  
2430 2434 2435 2437  
2440 2499 2504 2509 2524 2575 2649 2651 2662 2718 2723 2724  
2726 2729 3251  
Multipunch Codes: 017 141 151 431 443 445 472 477 481 53& 532  
533 535 017 02&  
04- 147 226 231 397 398 431 436 440 441 443 445 477 532 537  
57- 575 592 593 597  
603 017 02& 04- 05- 229 38- 398 431 440 441 443 445 477 532  
537 57- 597 603

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1994-109703